NOTIFICATION OF ADDENDUM ADDENDUM NO. 1 DATED 8/07/2009

Control	0262-07-020, ETC.
Project	BR 2009(870), ETC.
Highway	FM 1915
County	MILAM

Ladies/Gentlemen:

Attached please find an addendum on the above captioned project. Included in the attachment is an adendum notification which details the changes and the respective proposal pages which were added and/ or changed.

Except for new bid insert pages, it is unnecessary to return any of the pages attached.

Bid insert pages must be returned with the bid proposal submitted to the Department, unless your firm is submitting a bid using a computer print out. The computer print out must be changed to reflect the new bid item information.

Contractors and material suppliers, etc. who have previously been furnished informational proposals are not being furnished a copy of the addendum. If you have a subcontractor on the above project, please advise them of this addendum. Acknowledgment of this addendum is not requested if your company has been issued a proposal stamped "This Proposal Issued for Informational Purposes."

You are required to acknowledge receipt of this addendum on the Addendum Acknowledgement form contained in your bid proposal by placing a mark in the box next to the respective addendum.

Failure to Acknowledge receipt of this addendum in your bid proposal will result in your bid not being read.

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SUBJECT: PLANS AND PROPOSAL ADDENDUMS
                              CONTROL: 0262-07-020
       PROJECT: BR 2009(870)
       COUNTY: MILAM
       LETTING: 08/11/2009
      REFERENCE NO: 0806
                          PROPOSAL ADDENDUMS
  PROPOSAL COVER
X BID INSERTS (SH. NO.: 1-8
X GENERAL NOTES (SH. NO.: E THRU J
_ SPEC LIST
             (SH. NO.:
_ SPECIAL PROVISIONS:
  ADDED:
      DELETED:
  SPECIAL SPECIFICATIONS:
  ADDED:
      DELETED:
X OTHER: SEE CHANGES BELOW:
DESCRIPTION OF ABOVE CHANGES
(INCLUDING PLANS SHEET CHANGES)
BID INSERTS:
 SHEET 1-8: CHANGED QUANTITY FOR ITEM 134-2001.
GENERAL NOTES:
 SHEET E: REVISED MILESTONE DATES.
 SHEET F: NOTES ADDED FOR ITEMS 110 & 132 AND FOR ITEM 134.
 SHEETS G THRU I: NOTES SHIFTED DUE TO ADDED NOTES.
 SHEET J: DELETED ITEM 504 NOTES.
PLAN SHEETS:
 SHEET 7: REMOVED NOTE 1.
 SHEETS 8B THRU 8D: GENERAL NOTES CHANGES AS DESCRIBED ABOVE.
 SHEETS 9 & 14: CHANGED QUANTITY FOR ITEM 134-2001.
 SHEETS 23, 25, 28 AND 31: REPLACED TCP SHEETS.
 SHEET 86: REMOVED NOTE.
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ALT	ITEM NO	DESC CODE	S.P. NO.	UNIT BID PRICE ON WRITTEN IN WOR		UNIT	APPROX QUANTITIES	DEPT USE ONLY
	100	2002	002	PREPARING ROW and	DOLLARS CENTS	STA	42.650	1
	100	2009	002	PREPARING ROW (TREE) (6" TO and	24" DIA) DOLLARS CENTS	EA	10.000	2
	110	2001		EXCAVATION (ROADWAY) and	DOLLARS CENTS	CY	8,150.000	3
	110	2002		EXCAVATION (CHANNEL) and	DOLLARS CENTS	CY	309.000	4
	132	2006		EMBANKMENT (FINAL)(DENS (CONT)(TY C) DOLLARS CENTS	CY	4,848.000	5
	132	2022		EMBANKMENT (VEHICLE)(DEN C) and	DOLLARS CENTS	CY	90.000	6
	134	2001		BACKFILL (TY A) and	DOLLARS CENTS	STA	3.950	7
	160	2003		FURNISHING AND PLACING TO and	PSOIL (4") DOLLARS CENTS	SY	30,059.000	8
	164	2003	002	BROADCAST SEED (PERM) (RU and	RAL) (CLAY) DOLLARS CENTS	SY	30,059.000	9
	164	2009	002	BROADCAST SEED (TEMP) (WA	RM) DOLLARS CENTS	SY	15,030.000	10

	PROPOSAL SHEET
C.	TxDOT
	FORM 234-B I-61-5N

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ALT	ITEM NO	DESC CODE	S.P. NO.	UNIT BID PRICE ON WRITTEN IN WORI		UNIT	APPROX QUANTITIES	DEPT USE ONLY
	164	2011	002	BROADCAST SEED (TEMP) (COC	DL) DOLLARS CENTS	SY	15,030.000	11
	168	2001		VEGETATIVE WATERING and	DOLLARS CENTS	MG	240.200	12
	247	2320	033	FL BS (CMP IN PLC)(TY E GR 2) (and	(7") DOLLARS CENTS	SY	2,352.000	13
	247	2355	033	FL BS(CMP IN PLC)(TY E GR 2)(8	DOLLARS CENTS	SY	6,207.000	14
	275	2001		CEMENT	DOLLARS CENTS	TON	134.000	15
	275	2061		CEM TRT (MX EXT MTL/NW BAS	SE)(DC)(10") DOLLARS CENTS	SY	8,138.000	16
	316	2015		ASPH (RC-250) and	DOLLARS CENTS	GAL	1,980.000	17
	316	2406		AGGR (TY-B GR-5 OR TY-L GR-5 and	SAC-B) DOLLARS CENTS	CY	70.000	18
	316	2414		AGGR (TY-PB GR-4 OR TY-PL GR	2-4 SAC-A) DOLLARS CENTS	CY	74.000	19
	316	2567		ASPH(AC-15P OR20-5TR OR20XP and	OR10-2TR) DOLLARS CENTS	GAL	3,602.000	20
	340	2106	003	D-GR HMA(METH) TY-D PG64-22	DOLLARS CENTS	TON	807.000	21

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ALT	ITEM NO	DESC CODE	S.P. NO.	UNIT BID PRICE ON WRITTEN IN WOR		UNIT	APPROX QUANTITIES	DEPT USE ONLY
	400	2005		CEM STABIL BKFL and	DOLLARS CENTS	CY	201.800	22
	400	2006		CUT & RESTORING PAV	DOLLARS CENTS	SY	73.000	23
	402	2001		TRENCH EXCAVATION PROTEC	CTION DOLLARS CENTS	LF	90.000	24
	403	2001		TEMPORARY SPL SHORING and	DOLLARS CENTS	SF	80.000	25
	407	2001		SHEET PILING (PZ-27) and	DOLLARS CENTS	SF	3,600.000	26
	416	2002		DRILL SHAFT (24 IN) and	DOLLARS CENTS	LF	594.000	27
	420	2003	002	CL C CONC (ABUT)	DOLLARS CENTS	CY	44.800	28
	420	2004	002	CL C CONC (BENT)	DOLLARS CENTS	CY	53.500	29
	420	2029	002	CL S CONC (SLAB)	DOLLARS CENTS	CY	187.500	30
	420	2033	002	CL S CONC (APPR SLAB) and	DOLLARS CENTS	CY	116.200	31
	425	2016	001	PRESTR CONC SLAB BEAM (4S and	B15) DOLLARS CENTS	LF	2,611.720	32

OJECT BR 2009(870)	, ETC.
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ALT	ITEM NO	DESC CODE	S.P. NO.	UNIT BID PRICE ON WRITTEN IN WORI		UNIT	APPROX QUANTITIES	DEPT USE ONLY
	428	2001	001	CONC SURF TREAT (CLASS I)		SY	1,178.000	33
				and	DOLLARS CENTS			
	430	2188		CL C CONC FOR EXT STR(MISC)	DOLLARS CENTS	CY	17.000	34
	432	2001		RIPRAP (CONC)(4 IN) and	DOLLARS CENTS	CY	14.000	35
	432	2040		RIPRAP (MOW STRIP)(5 IN) and	DOLLARS CENTS	CY	108.000	36
	432	2041		RIPRAP (STONE COMMON)(DRY	O(18 IN) DOLLARS CENTS	CY	168.000	37
	450	2001		RAIL (TY T101) and	DOLLARS CENTS	LF	742.000	38
	454	2005		ARMOR JOINT (WITH SEAL) and	DOLLARS CENTS	LF	59.000	39
	462	2003		CONC BOX CULV (4 FT X 2 FT) and	DOLLARS CENTS	LF	50.000	40
	464	2005		RC PIPE (CL III)(24 IN) and	DOLLARS CENTS	LF	242.000	41
	464	2009		RC PIPE (CL III)(36 IN) and	DOLLARS CENTS	LF	102.000	42
	467	2107		SET (TY I)(S= 4 FT)(HW= 3 FT)(4:	1)(C) DOLLARS CENTS	EA	2.000	43

	ITEM-CODE							DEDE
ALT	ITEM NO	DESC CODE	S.P. NO.		UNIT BID PRICE ONLY. WRITTEN IN WORDS		APPROX QUANTITIES	DEPT USE ONLY
	467	2224		SET (TY II)(24 IN)(RCP)(4:1)(C) and	DOLLARS CENTS	EA	4.000	44
	467	2227		SET (TY II)(36 IN)(RCP)(4:1)(C) and	DOLLARS CENTS	EA	4.000	45
	467	2236		SET (TY II)(24 IN)(RCP)(6:1)(C) and	DOLLARS CENTS	EA	4.000	46
	496	2001		REMOV STR (BOX CULVERT) and	DOLLARS CENTS	EA	1.000	47
	496	2005		REMOV STR (WINGWALL) and	DOLLARS CENTS	EA	4.000	48
	496	2010		REMOV STR (BRIDGE 100-499 FT and	CLENGTH) DOLLARS CENTS	EA	2.000	49
	496	2016		REMOV STR (PIPE) and	DOLLARS CENTS	EA	2.000	50
	500	2001	005	MOBILIZATION and	DOLLARS CENTS	LS	1.000	51
	502	2001	033	BARRICADES, SIGNS AND TRAF DLING and	FFIC HAN- DOLLARS CENTS	МО	8.000	52
	506	2002	011	ROCK FILTER DAMS (INSTALL) and	(TY 2) DOLLARS CENTS	LF	600.000	53

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ALT	ITEM NO	DESC CODE	S.P. NO.	UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	506	2009	011	ROCK FILTER DAMS (REMOVE) DOLLARS and CENTS	LF	600.000	54
	506	2024	011	BACKHOE WORK (EROSION & SEDM CONT) DOLLARS and CENTS	HR	8.000	55
	506	2034	011	TEMPORARY SEDIMENT CONTROL FENCE DOLLARS and CENTS	LF	2,764.000	56
	508	2002		CONSTRUCTING DETOURS DOLLARS and CENTS	SY	524.000	57
	530	2012		DRIVEWAYS (SURF TREAT) DOLLARS and CENTS	SY	432.000	58
	530	2018		TURNOUTS (SURF TREAT) DOLLARS and CENTS	SY	15.000	59
	540	2001	015	MTL W-BEAM GD FEN (TIM POST) DOLLARS and CENTS	LF	600.000	60
	540	2013	015	MTL BEAM GD FEN TRANS (T101) DOLLARS and CENTS	EA	12.000	61
	542	2001		REMOVING METAL BEAM GUARD FENCE DOLLARS and CENTS	LF	375.000	62
	542	2002		REMOVING TERMINAL ANCHOR SECTION DOLLARS and CENTS	EA	12.000	63
	542	2003		RM MTL BM GD FEN TRANS (THRIE-BEAM) DOLLARS and CENTS	EA	12.000	64

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ALT	ITEM NO	DESC CODE	S.P. NO.	UNIT BID PRICE ONLY. WRITTEN IN WORDS	UNIT	APPROX QUANTITIES	DEPT USE ONLY
	544	2006		GDRAIL END TRT(INST)(WOOD POST)(TY III) DOLLARS and CENTS	EA	12.000	65
	560	2004	001	MAILBOX INSTALL-S (WC-POST) TY 3 FND DOLLARS and CENTS	EA	1.000	66
	644	2001		INS SM RD SN SUP&AM TY 10BWG(1) SA(P) DOLLARS and CENTS	EA	6.000	67
	644	2060		REMOVE SM RD SN SUP & AM DOLLARS and CENTS	EA	14.000	68
	658	2260		INSTL DEL ASSM (D-SW)SZ (TYC)GF1 DOLLARS and CENTS	EA	40.000	69
	658	2328		REMOVE DELIN & OBJECT MARKERS ASSMS DOLLARS and CENTS	EA	30.000	70
	658	2337		INSTL OM ASSM (OM-2Z)(FLX)GND(BI) DOLLARS and CENTS	EA	6.000	71
	662	2004		WK ZN PAV MRK NON-REMOV (W) 4" (SLD) DOLLARS and CENTS	LF	9,812.000	72
	662	2032		WK ZN PAV MRK NON-REMOV (Y) 4" (SLD) DOLLARS and CENTS	LF	9,812.000	73
	662	2115		WK ZN PAV MRK SHT TERM (TAB) TY Y-2 DOLLARS and CENTS	EA	246.000	74
	666	2012		REFL PAV MRK TY I (W) 4" (SLD)(100MIL) DOLLARS and CENTS	LF	8,328.000	75

and

	ITEM-CODE							DEDE
ALT	ITEM NO	DESC CODE	S.P. NO.		UNIT BID PRICE ONLY. WRITTEN IN WORDS		APPROX QUANTITIES	DEPT USE ONLY
	666	2111		REFL PAV MRK TY I (Y) 4" (SLD) and	DOLLARS CENTS	LF	8,529.000	76
	666	2145		REF PAV MRK TY II (W) 4" (SLD and) DOLLARS CENTS	LF	853.000	77
	666	2178		REF PAV MRK TY II (Y) 4" (SLD) and	DOLLARS CENTS	LF	853.000	78
	672	2015	034	REFL PAV MRKR TY II-A-A	DOLLARS CENTS	EA	107.000	79
	677	2001		ELIM EXT PAV MRK & MRKS (4 and	") DOLLARS CENTS	LF	9,812.000	80
	678	2021		PAV SURF PREP FOR MRK (BLA	ST CLN)(4") DOLLARS CENTS	LF	1,706.000	81
	5172	2001		GEOGRID BASE REINFORCEME	NT (TY A) DOLLARS	SY	6,825.000	82

CENTS

Highway: FM 1915 Control: 0262-07-020, etc.

County: Milam

General Notes:

BASIS OF ESTIMATE

ITEM	DESCRIPTION	COURSE	RATE	AMOUNT	QUANTITY
166*	Fertilizer			30,059 SY	0.20 TON
168	Vegetative Watering		8 GAL/ SY	30,059 SY	240.2 MG
275	Cement		3.5% @ 0.0164 TON/SY	8,138 SY	134 TON
316	Asphalt (RC 250)	1ST	0.22 GAL/ SY	9,004 SY	1,980 GAL
316	ASPH(AC-15P OR20- 5TR OR20XP OR10- 2TR)	2ND	0.40 GAL/ SY	9,004 SY	3,602 GAL
316	Aggregate (TY B OR L GR 5) (SAC-B)	1ST	1 CY/ 130 SY	9,004 SY	69 CY
316	Aggregate (TY PB OR PL GR- 4) (SAC A)	2ND	1 CY/ 120 SY	9,004 SY	75 CY
340	D-GR HMA (METH) TY B PG 64-22		1320 LB/SY	79 SY***	52 TON
340	D-GR HMA (METH) TY C		220 LB/SY	79 SY***	9 TON
340	D-GR HMA (METH) TY D PG 64-22		510 LB/SY**	2,923 SY +MISC	745 TON 62 TON
506	BACKHOE WORK (EROSION & SEDMCONT)		1 HR/1000 LF	7,830 LF	8 HR

^{*} For contractor's information only. Tonnage represents Nitrogen content only.

^{***} For contractor's information only. Subsidiary to item 508.

^{**} Level-Up varies from 0" to 9".

Highway: FM 1915 Control: 0262-07-020, etc.

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GENERAL:

Notify the Engineer of the exact date of bridge removal at least twenty (20) working days prior to the removal of the existing structure to allow for compliance with the Texas Department of State Health Service requirements for structural demolition. Bridge removal will not be allowed to take place until this notice is given.

Send eligible shop plan submittals with PDF or DAT attachments directly to the reviewing office.

ITEM 5 "CONTROL OF THE WORK"

Earthwork cross sections are available at the Bridge Engineer's office at 1300 N. Texas Ave. in Bryan, TX for inspection by prospective bidders. These cross-sections are for non-construction purposes only, and it is the responsibility of the prospective bidder to validate the data for this project. A free computer diskette, a computer transfer of files, or a PDF that contains the earthwork information may be obtained from the Engineer's office. If copies of the actual cross-section drawings, in instead of or in addition to, these files are desired, a set of cross-sections will be available at the Engineer's office for borrowing by copying companies for the purpose of making copies for the bidder at the bidder's expense.

ITEM 7 "LEGAL RELATIONS AND RESPONSIBILITIES"

Prove to the Engineer's satisfaction that employees operating equipment on the travel lanes have a valid State Drivers License issued by one of the United States of America.

Contact the one-call center by dialing 811 at least 72 hours prior to beginning work. Provide all location information for them to send excavation alerts to all potentially affected utility companies.

At the end of each work day, remove all grade differentials transverse to centerline.

State contract mowers will mow the right of way during the growing season. The Contractor will be notified by the Engineer one week in advance of the anticipated time when mowers will be in the limits of the project. Clean the right of way to such a condition that allows the mowing contractors to safely mow.

The nesting/breeding season for migratory birds is March 1 – September 1.

Do not destroy nests on structures or in trees within the project limits during the nesting/breeding season.

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Prevent the building of nests on any structure or tree within the project limits throughout construction if work/removal is to be performed during the nesting/breeding season.

This can be accomplished by application of bird repellant gel, netting, removal by hand every 3-4 days, or any other non threatening method. All methods must be approved by the Bryan District Environmental Section well in advance of planned use.

The Bryan District Environmental Section can be contacted at (979) 778-9766 to assist with removal of wildlife that will not leave on their own with gentle persuasion.

Do not initiate activities in a project specific location (PSL) associated with a U.S. Army Corps of Engineers (USACE) permit area that have not been previously evaluated by the USACE as part of the permit review of this project. Such activities include, but are not limited to, haul roads, equipment staging areas, borrow and disposal sites. Associated defined here means materials are delivered to or from the PSL. The permit area includes all waters of the U.S. or associated wetlands affected by activities associated with this project. Special restrictions may be required for such work. Take responsibility for any and all consultations with the USACE regarding activities, including project specific locations (PSLs), that have not been previously evaluated by the USACE. Provide the department with a copy of all consultation(s) or approval(s) from the USACE prior to initiating activities.

Proceed with activities in PSLs that do not affect a USACE permit area if a self determination has been made that the PSL is non-jurisdictional or proper USACE clearances have been obtained in jurisdictional areas or have been previously evaluated by the USACE as part of the permit review of this project. The contractor is solely responsible for documenting any determination(s) that their activities do not affect a USACE permit area. Maintain copies of their determination(s) for review by the department or any regulatory agency.

Document and coordinate with the USACE, if required, prior to any excavation hauled from or embankment hauled into a USACE permit area by either (1) or (2) below.

- (1) Restricted Use of Materials for the Previously Evaluated Permit Areas. Document both the project specific location (PSL) and their authorization. Maintain copies for review by the department or any regulatory agency. When an area within the project limits has been evaluated by the USACE as part of the permit process for this project:
 - a. Suitable excavation of required material in the areas shown on the plans and cross sections as specified in Item 110 is used for permanent or temporary fill (Item 132, Embankment) within a USACE permit area;
 - b. Suitable embankment (Item 132) from within the USACE permit area is used as fill within a USACE evaluated area; and,

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c. Unsuitable excavation or excess excavation ["Waste"] (Item 110) that is disposed of at a location approved by the Engineer within a USACE evaluated area.

- (2) Contractor Materials from Areas Other than Previously Evaluated Areas. Provide the department with a copy of all USACE coordination or approvals prior to initiating any activities for an area within the project limits that has not been evaluated by the USACE or for any off right of way locations used for the following, but not limited to, haul roads, equipment staging areas, borrow and disposal sites:
 - a. Item 132, Embankment, used for temporary or permanent fill within a USACE permit area; and,
 - b. Unsuitable excavation or excess excavation ["Waste"] (Item 110, Excavation) that is disposed of outside a USACE evaluated area.

ITEM 8 "PROSECUTION AND PROGRESS"

Working days will be computed and charged in accordance with Article 8.3.A.4 Standard day workweek.

Time charges were calculated based on concurrent work on both bridges.

MILESTONE 1:

Milestone 1 is for the closing of the South Elm Creek Bridge.

The road-user cost liquidated damages for Milestone 1 is \$500 per day.

The daily incentive rate for substantial completion of Milestone 1 is \$500.

The maximum number of working days for computing the Milestone 1 incentive credit is 10 days.

Substantially complete Milestone 1 in 85 calendar days charged in accordance with article 8.3.A.1 Five-Day Workweek.

The time charges for Milestone 1 will begin upon the closure of South Elm Creek Bridge and approaching roadway to public traffic.

The time charges for Milestone 1 will end when, in the opinion of the Engineer, the Contractor has completed the following items of work, which define the term "substantially complete":

1) Complete the entire bridge structure and approach slabs.

Highway: FM 1915 Control: 0262-07-020, etc.

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2) Complete the entire bridge rail, MBGF, and end treatments.

3) Complete all roadway earthwork, flex base, prime and one course surface treatment.

The work included in this Milestone must be performed between August 1 and April 30 in order not to conflict with the local harvest season.

The following standard detail sheets have been modified.

BAS A PSAB

By noon of each Wednesday, provide the Engineer with a written outline of the daily work schedule for the following week. Include in the outline the times and places for proposed traffic control changes, lane and shoulder closures, and moving operations or other operations that affect traffic on the roadway. Unless otherwise authorized by the Engineer, prosecute the work on this project in accordance with the sequence of work shown as shown below:

- 1) Set advance signing and barricades
- 2) Place erosion control devices
- 3) Place detour at S Elm and temporary widening at Lipan Creek Bridge
- 4) Close S Elm Creek Bridge
- 5) Construct S Elm Creek Bridge
- 6) Construct Lipan Creek Bridge
- 7) Construct culverts at Lipan Creek and repair Culvert near S Elm Creek bridge
- 8) Construct approach pavement, signing and striping
- 9) Final cleanup

Some of these operations may be performed simultaneously.

Working days estimated for this project include curing, testing and performance periods. Time will not be suspended for curing, testing or performance periods, except no time will be charged during testing and performance periods which occur after the final inspection as described in Article 5.8.B.2 of the standard specifications.

ITEM 100 "PREPARING RIGHT OF WAY"

If a burn ban is in effect for Milam County, obtain written approval of proposed burn locations and procedures from the local commissioners court prior to burning brush.

ITEM 110 AND 132 "EXCAVATION" AND "EMBANKMENT"

Provide embankment material with a plasticity index between 10 and 30.

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Material containing greater than 3,000 ppm of sulfate will not be allowed for areas to be stabilized with item 275.

Material having more than 1 percent organic content will not be allowed in the top 1 foot of subgrade being stabilized.

Removal of abandoned roadbed included in excavation quantities.

ITEM 134 "BACKFILLING PAVEMENT EDGES"

Furnish Type A material meeting one of the following requirements:

Item 132, Type B;

Item 247, Type D Grade 3;

Reclaimed Asphalt Pavement (RAP) with 95% of the RAP passing the 2-in.sieve.

ITEM 160 "TOPSOIL"

All slopes requiring topsoil will be tracked immediately upon final grading to prevent erosion. Tracking consists of operating a tracked vehicle or equipment up and down the slopes leaving track marks perpendicular to the direction of the slope. Tracking slopes to prevent erosion will not be measured or paid for directly, but will be subsidiary to pertinent Items.

Salvage approximately <u>50%</u> of topsoil from areas shown on plans. Maximum salvage depth is 4 in. Apply 4 in. layer of topsoil to designated areas.

Topsoil may be obtained from the right of way at sites of proposed excavation and embankment.

ITEM 166 "FERTILIZER"

Fertilize all areas of project that are being seeded or sodded. The application rate and quantity shown in the "Basis of Estimate" are in terms of the nitrogen content.

ITEM 168 "VEGETATIVE WATERING"

Vegetative watering is required for all areas of the project that are being seeded or sodded. The application rate is shown in the "Basis of Estimate".

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ITEM 247 "FLEXIBLE BASE"

Place flexible base in equal lifts of 4 to 8 in. in depth unless otherwise approved by the Engineer.

Provide Type E material consisting of crushed limestone produced and graded from oversize quarried aggregate that originates from a single, naturally occurring source. Do not use gravel or multiple sources. No blending of sources will be allowed in Type E material.

ITEM 275 "CEMENT TREATMENT (ROAD MIXED)"

Cease stabilization when the sulfate content is greater than 3,000 ppm or when the organic content is greater than 1%. Additional testing will be performed to determine the target cement content when these conditions are encountered.

ITEM 301 "ASPHALT ANTISTRIPPING AGENT"

When the Contractor adds lime as an anti-stripping agent, the lime shall be added to the asphaltic concrete in the methods specified in this item unless otherwise approved by the Engineer. If an alternate method is proposed, the Engineer's approval will be based on test method Tex-242-F performed on the asphaltic concrete produced through the plant.

ITEM 316 "SURFACE TREATMENTS"

AC - 15P, 20 - 5TR, or 10 - 2TR will be used during warm weather placement. 20XP will be used for winter/cool weather placement as directed by the Engineer. Air and surface temperature for asphalt material application will be in accordance with the specification and the manufacturer's recommendation.

When placing surface treatment on base material, prepare surface by sweeping or other approved methods. Before applying bituminous material, lightly sprinkle the surface with water. When directed, sweep the surface after sprinkling with water. Do not apply bituminous material when water is puddling on the surface.

After rolling is completed, control the speed of traffic at a maximum of 30 mph for a minimum of 2 hours or as directed before opening to the normal posted speed limit.

Sweep excess aggregate no sooner than 2 hours after rolling or as directed.

Provide two medium pneumatic tire rollers.

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Vehicles used to haul aggregate from the stockpile to the chip spreader will not be overloaded. Any damage caused by vehicles will be repaired by the Contractor at his expense and subsequent loads will be reduced so as not to cause further damage to the surface.

Transverse variance rates shall be used as directed. The nozzles outside the wheel paths will output up to 20% more asphalt by volume than the nozzles over the wheel paths.

The Contractor may be required to furnish and set string line to insure straight and uniform alignment as directed by the Engineer. The Contractor may use other methods subject to approval of the Engineer.

Unless authorized by the Engineer, a minimum 21 day curing period will be required between the first and second surface treatment applications.

Surface treat driveways before the roadway is surface treated (second course only).

ITEM 340 "DENSE GRADED HOT MIX ASPHALT (METHOD)"

Hamburg Wheel Test Requirements						
High- Temperature	Test Method	Laboratory Mixture Design or Trial Batch	Production and Placement Test ¹			
Binder Grade		Minimum # of Passes @ 0.5"	Minimum # of Passes @ 0.5" Rut			
Dilluci Grade		Rut Depth, Tested @122°F	Depth, Tested @122°F			
PG 64 or lower	Tex-242-F	7,000	7,000			
PG 70	Tex-242-F	15,000	15,000			
PG 76 or higher	Tex-242-F	20,000	20,000			

^{1.} The Engineer may accept if no more than 1 of the 5 most recent Hamburg Wheel tests is below the specified number of passes and the failing test is no more than 2,000 passes below the specified number of passes.

Target laboratory molded density is 97%.

Add one (1.0) percent hydrated lime, commercial, or lime slurry lime, based on the total aggregate weight, as mix enhancer for all mixture types. Provide hydrated lime or commercial lime slurry in accordance with DMS-6350, "Lime and Lime Slurry". Add hydrated lime or commercial lime slurry in accordance with Item 301.4.B.

Use a minimum PG 58 binder as the tack coat. Apply it through a distributor spray bar in accordance with Article 316.3(A) Distributor.

Highway: FM 1915 Control: 0262-07-020, etc.

County: Milam

ITEM 420 "CONCRETE STRUCTURES"

At headwall to wingwall construction joints, use epoxy as a bonding agent.

ITEM 421 "HYDRAULIC CEMENT CONCRETE"

Strength-testing equipment will be provided by the State.

Perform test Tex-416-A or Tex-414-A to determine the air content of freshly-mixed concrete when the mix contains air entrainment.

Air entrainment is no longer required except in Class P and Class HES concrete. For all classes of concrete except P and HES, if air entrainment agent is used in the concrete batch, maximum air content will be measured for acceptance, but not minimum air content.

ITEM 432 "RIPRAP"

Stone riprap may be artificial stone. Filter Fabric is required with all store riprap.

ITEM 464 "REINFORCED CONCRETE PIPE"

Seal joints using cold applied plastic asphalt sewer compound or cold applied preformed plastic gaskets. When cohesionless material is used for backfill, wrap the joints prior to backfilling with sand proof tape following the manufacturer's recommendations or with an equivalent material and method.

ITEM 502 "BARRICADES, SIGNS AND TRAFFIC HANDLING"

Place advance sign indicating the closure of bridge at South Elm Creek, 2 weeks in advance of closing the bridge. Place one sign at each bridge approach.

Warning reflectors or approved substitutes may be mounted on plastic drums in place of Type C steady burn warning lights if approved by the Engineer.

Place "Pavement Ends" (CW8-3) signs until the first application of surface treatment is placed.

Highway: FM 1915 Control: 0262-07-020, etc.

County: Milam

Removal of ground mounted temporary signs and supports as specified on standard sheet BC(5)-07, shall include the immediate backfilling of support holes with Type B embankment material and the compaction of the backfill material.

ITEM 544 "GUARDRAIL END TREATMENT"

Provide a TYPE III SGT for this project.

ITEM 560 "MAILBOX ASSEMBLIES"

Use new materials for single mailbox assemblies.

Use "OM-2VP, CLASS 1" object markers for mailbox supports.

Retain and re-use newspaper holders removed or relocated during construction for placement on new mailbox assemblies in accordance with mailbox standard sheets.

ITEM 644 "SMALL ROADSIDE SIGN SUPPORTS AND ASSEMBLIES"

Sign locations shown on the plans are approximate. Before placing the signs, stake the sign locations and obtain the approval of the Engineer.

Any components of removed existing signs shall become the property of the State.

ITEM 666 "REFLECTORIZED PAVEMENT MARKINGS"

Unless authorized by the Engineer, the Contractor will not place the pavement markings on the resurfaced roadway until it has cured for 3 days.

All striping limits must be approved by the Engineer before striping operations may begin.

Highway: FM 1915 Control: 0262-07-020, etc.

County: Milam

Furnish Type II drop-on glass traffic beads conforming to DMS-8290 for use with Type I marking materials.

ITEM 672 "RAISED PAVEMENT MARKERS"

Unless authorized by the Engineer, the Contractor will not place the raised pavement markers on the resurfaced roadway until it has cured for 14 days.